

MARSHALL STAR

Serving the Marshall Space Flight Center Community

Dec. 19, 2002



Photos by Emmett Given, NASA/Marshall Center

O'Keefe at Marshall for IFM Core Financial Awards

The Marshall Center hosted NASA's Integrated Financial Management Core Financial Project awards and reception last Monday in Morris Auditorium. In the left photo, Pam Cucarola, project manager of the IFM Core Financial Project, receives a Platinum Award from Patrick Ciganer, NASA's executive officer for the Integrated Financial Management Program. More than 300 NASA team members were honored with awards. NASA Administrator Sean O'Keefe, right photo, addresses the honorees during the awards ceremony at Marshall. Also visiting Marshall for the awards were Dan Mulville, NASA's associate deputy administrator, and Michael Mann, director of the Agency's Integrated Financial Management Program.

'One NASA' e-mail is here

from the Office of the Chief Information Officer

The Center Operations Directorate is currently supporting one of the major areas of emphasis associated with the Agency's "One NASA" initiative – the e-mail system.

The Marshall Center has been working, along with other NASA centers, to move the Agency to a more unified structure for our e-mail services. The effort is spearheaded by acting NASA Chief Information Officer Paul Strassmann

As the first step of this initiative, the Marshall Center will adopt new mail addresses for civil servants only. Contractors at the centers will not be affected.

See E-mail on page 2

F2M 'town hall' meeting at Marshall focuses on improving processes

Courtney Stadd, NASA's chief of staff and White House liaison, spent last Thursday at the Marshall Center encouraging employees to use the Freedom to Manage system to help streamline work processes.

Stadd also brought several members of the Headquarters' F2M team for an All-Hands meeting in Morris Auditorium with Marshall team members. The team later conducted several "breakout" sessions with Marshall's F2M team members.

Freedom to Manage fulfills the five initiatives of the President's Management Agenda by identifying and removing impediments to effective management.

To learn more about F2M, or how to contribute ideas to streamline work



Photo by Doug Stoffer, NASA/Marshall News

Stadd addresses Marshall employees last Thursday.

processes, go to <http://f2m.nasa.gov/> or go to the link on "Inside Marshall."

E-mail

Continued from page 1

So, as a civil servant, instead of being jane.doe@msfc.nasa.gov, Doe will now be jane.a.doe@nasa.gov. This address change went into effect last Monday.

Some NASA centers already have implemented this change.

Old e-mail addresses for civil servants, such as jane.doe@msfc.nasa.gov will remain active, but eventually will be phased

out. This should minimize the impacts of this change. You can search One NASA e-mail addresses at: <https://isd.jsc.nasa.gov/OneNASAemail/>
For questions, 544-HELP, Option 0.

'One NASA' e-mail frequently asked questions

1. Does the format change affect only personal user accounts and not generic or shared accounts owned by civil servants? Examples: Roundup, Information Services Center

This will only affect personal user accounts. Generic accounts will remain "@msfc.nasa.gov".

2. How are the entries in distribution lists to be updated?

Should be automatically accomplished within Exchange, once the new addresses are added to our Exchange properties.

3. Is the effect on Web pages that the user's addresses will have to be manually updated?

Yes, users will have to make changes to Web sites manually. However, this can be a phased process, as the current addresses will remain intact for a while, at least until we have a final One NASA e-mail system in place.

4. Are we going to keep X500?

Yes. The X.500 directory currently holds all PKI certificates, as well as other important information. X.500 will be modified for the new @nasa.gov addresses.

5. Are we going to keep our aliases?

Yes. For example, user Jonathan Allen Doe (who goes by Allen) has the following addresses, all of which will deliver to his account: jonathan.a.doe@msfc.nasa.gov, allen.doe@msfc.nasa.gov, j.a.doe@msfc.nasa.gov.

6. Will we have similar multiple @nasa.gov addresses?

Initially no. All civil servants will have only one deliverable @nasa.gov e-mail address. Later, the new unified messaging system may provide more flexibility for aliases.

7. When will my current e-mail addresses stop working?

We don't have a specific date for this yet, but all current addresses will be valid for at least six months. This first step in One NASA e-mail is only adding a new e-mail address for civil servants, not taking away anything.

8. I'm a civil servant and I'm ordering new business cards. Which e-mail address should I use?

You should use your new One NASA "@nasa.gov" address. You can find out what your *new address is by searching the MSFC X.500 Directory.*

9. Is MSFC the only center doing this One NASA e-mail thing?

No. Civil servants at all NASA centers are scheduled to convert to the One NASA e-mail addressing within the coming months. Their new addresses should also be available in the X.500 directory.

10. Why is my e-mail address changing?

NASA wishes to eliminate perceptions, real or otherwise, regarding the isolation of field centers from each other. Remov-

ing field center identifiers from e-mail addresses, and later on, unifying NASA e-mail systems, has been designated as a part of this effort.

11. Who does this affect?

NASA civil servants. E-mail addresses for contractors who use NASA e-mail systems, and resource e-mail addresses, such as conference rooms and group accounts, will not be affected.

12. What if I'm not exactly a permanent NASA civil servant (student, professor, military, etc.)?

Whatever is designated in the x.500 employer field determines NASA civil servant status for @nasa.gov addressing.

13. Why is there a '-1', '-2', '-n', etc.?

The '-n' will appear in @nasa.gov addresses for those people that do not have a middle initial in X500 or have a name which is a duplicate of someone else in the Agency. Civil servants with no middle initial receive an '-n' to avoid duplicate addresses throughout the Agency. All NASA field centers participated in the new naming convention. Although MSFC did not prefer using a number, the majority of the field centers preferred a '-1' to avoid confusing the number with the letter '1'.

14. Will my e-mail address change again in the future when NASA e-mail is unified?

The answer to this question won't be known for several months, however specific attention is being given to avoid this issue.

15. Will my old e-mail address still work? If so, for how long?

Your old msfc.nasa.gov e-mail address will still work at least through March.

16. What if my name changes?

You should utilize the existing HR process to indicate a change of name. As always, you will receive a new e-mail address and your previous address must be deactivated. If you want to keep your old e-mail address active you shouldn't change your name.

17. How will this affect my secure e-mail/PKI/Entrust?

There should not be any effect, as secure e-mail will remain the same. However, a NASA PKI user might notice a warning message. When these NASA PKI users login to Entrust after the bulk update, they will receive a message from Entrust that their keys have been updated and a warning that if the user has made copies of their profile they should not use those old copies and then they will be prompted to restart any Entrust-Ready applications that are currently running.

18. How do I search on One NASA e-mail addresses?

<https://isd.jsc.nasa.gov/OneNASAemail/>

Educator astronaut Barbara Morgan assigned first flight

Teacher heading to Space Station in November 2003

from a NASA Headquarters release

Barbara Morgan, NASA's educator astronaut, has been assigned as a crewmember on a November 2003 Space Shuttle mission to the International Space Station.

NASA Administrator Sean O'Keefe made the announcement Dec. 12 at the Maryland Science Center in Baltimore, fulfilling his commitment earlier this year to send an educator into space in a renewed mission to inspire a new generation of explorers. Morgan's flight represents the first of what is expected to be many flights as part of a new Educator Astronaut Program, which will be unveiled in early 2003.

"NASA has a responsibility to cultivate a new generation of scientists and engineers," O'Keefe said. "Education has always been a part of NASA's mission, but we have renewed our commitment to get students excited about science and mathematics. The Educator Astronaut Program will use our unique position in space to help advance our nation's education goals."

Morgan's assigned mission, STS-118, has as its primary objectives to install additional truss segments that will increase power and communications to the International Space Station, and to deliver additional supplies for the Station's crew. Morgan will participate in a number of educational events from space and be actively involved in the flight as a fully trained NASA astronaut.

Commander Scott J. Kelly will lead the six-member STS-118 crew. Charles O. Hobaugh will be the Space Shuttle's pilot.

Veteran astronaut Dr. Scott E. Parazynski will be making his fifth space flight. The Canadian Space Agency's Dr. David R. Williams will return to space for a second time, and Lisa M. Nowak, will, like Morgan, make her first flight into space.

A native of McCall, Idaho, Morgan was selected



Marshall Imaging Services

Morgan

in 1985 as the backup candidate for Christa McAuliffe in the Teacher in Space Program. Following the Challenger accident in 1986, the program was suspended and Morgan worked with NASA's Education Office, meeting with teachers and students across the country to share her space training experiences and their relevance to the classroom and America's future.

In 1986, Morgan returned to teaching at McCall-Donnelly Elementary School in Idaho, but continued to travel the country in support of NASA's education efforts. In January 1998, she was selected by NASA to complete her astronaut training. For more than a year, Morgan has served as a spacecraft communicator, or CAPCOM, in Mission Control at NASA's Johnson Space Center in Houston, providing the voice link between the flight control team and crews orbiting in space.

"Barbara's commitment and dedication to education is an inspiration to teachers across the country," O'Keefe said. "She embodies the spirit and desire of this agency to get students excited about space again, and I'm pleased that she'll be able to fulfill that mission from orbit aboard the Space Shuttle and the International Space Station."

Additional information about Barbara Morgan and the International Space Station is available on the Web at:

<http://www.jsc.nasa.gov/Bios/htmlbios/morgan.html>

<http://spaceflight.nasa.gov>

Information on NASA's extensive education programs is available on the Web at: <http://education.nasa.gov>.



Photo by Emmett Given, NASA/Marshall Center

1 million hours without lost-time accident

Jim Carter, left, deputy director of the Center Operations Directorate, accepts an award on behalf of his organization for having worked 1 million hours without a lost-time accident. Marshall Deputy Director David King, right, congratulates Carter and the Center Operations Directorate during the presentation.

Two ordinary men, one extraordinary dream

Extracted from "Celebrating a Century of Flight," NASA Publication SP-2002

Editors Note: This week marks the beginning of the Centennial of Flight Celebration that will extend through the Year 2003. The Star is publishing this story in recognition of the Wright brothers' flight on Dec. 17, 1903.

Orville Wright once explained that he and his brother, Wilbur, were lucky to have grown up "in an environment where there was always much encouragement to children to pursue intellectual interests, to investigate whatever aroused curiosity."

The Wright boys first became interested in flight as children when their father presented them with a rubber-band-powered helicopter toy. Although neither of them attended college, Wilbur and Orville Wright were intellectual, intuitive, confident, and mechanically gifted. As young men, they operated both a print shop and a bicycle shop in their hometown of Dayton, Ohio. Still, their curiosity and technical skills drove them to pursue other challenges.

The brothers launched their aeronautical effort in 1899. They realized that their first challenge was finding a way to control a machine in the air. They tested their notion of a wing-warping control system on a small kite flown from a hill in Dayton. Between 1900 and 1902, they built three gliders, testing them over the sands of Kill Devil Hills near Kitty Hawk, N.C., a location that was ideal because of its high winds and tall dunes, with plenty of sand for soft landings.

Disappointed with the performance of their early gliders, the brothers conducted a series of wind tunnel tests in their bicycle shop during the fall of 1901. On the basis of those tests, and their experience with the gliders, they designed and built their third full-scale glider in 1902, and completed 1,000 flights with it, remaining airborne for as long as 26 seconds and covering distances of up to 622.5 feet.

Now they were ready to attempt a piloted, powered flight. With assistance from their machinist, Charles Taylor, they designed and built the aircraft and a four-cylinder internal combustion engine that would deliver precisely the amount of power required. They also built the propellers, based on their wind tunnel data. Success came on the morning of Dec. 17, 1903. Orville Wright made the first flight at about 10:35 a.m. -- a bumpy and erratic 12 seconds in the air. A few minutes later,

Wilbur flew the plane 175 feet-- just a few feet shorter than the wingspan of a Boeing 747. Orville then flew again, a distance of 200 feet. During the final flight of the day, piloted by Wilbur, the Wright Flyer remained airborne for 59 seconds and flew 852 feet. These four flights marked the first time that a powered, heavier-than-air machine, had made a sustained flight under the complete control of the pilot. The Wright brothers were not surprised by their success, for they had meticulously calculated how their machine would perform and were confident that it would fly once they had ironed out all the problems from their previous tests.

Within a few days of these flights, the Wright brothers were the subject of what were, for the most part, wild and inaccurate reports on the front pages of major newspapers from coast to coast. When they did not follow up with public flights in 1904, the press assumed that the Kitty Hawk story had been an exaggeration, if not a hoax.

Wilbur and Orville Wright pressed ahead, moving their experiments closer to their Dayton, Ohio, home. There, in 1904, in a meadow called Huffman Prairie, they built the Wright Flyer II, the first airplane to fly a circle in the air. The Flyer III followed in 1905, a plane that could stay in the air for over half an hour, turn, bank, and fly figure eights. The Wrights were determined not to fly in public until they had received the protection of a patent and had signed contracts for the sale of their machine. They ceased flying completely in the fall of 1905 and concentrated on finding buyers for their technology.

In 1908, the Wright brothers finally received due acclaim when Wilbur made public flights in Europe, amazing spectators with his flying skill and maneuverability of the Wright Model A biplane. That same year, Orville took a plane to Fort Myer, Va., where he demonstrated the Flyer. In 1909, they returned to Fort Myer and sold the world's first military plane.

By 1909, the Wright Company was turning out four planes a month, making it the largest airplane manufacturer in the world. They also formed the earliest exhibition teams, flying in various venues where they could publicize and market their planes.

Orville continued to fly through May 13, 1918, six years after Wilbur's death from typhoid fever. He sold his interest in their business in 1915, but remained actively engaged in other related pursuits, among them an ongoing disagreement with the Smithsonian Institution over who had been the first capable of flight, the Wrights or Samuel Langley. The Smithsonian had originally given the nod to Langley but later acquiesced in favor of the Wright brothers. When Orville Wright died in 1948, he had seen many of the advances in aviation that were a direct result of the work he and his brother had accomplished.



Orville and Wilbur Wright

'One NASA' officially kicks off Agency-wide

by Jonathan Baggs

NASA Administrator Sean O'Keefe formally kicked off "One NASA" during a televised address to Agency centers Dec. 11.

After O'Keefe's remarks, he took questions from employees at the various centers. Marshall Center Director Art Stephenson then took questions from team members in Morris Auditorium.

One NASA means "One team, optimally applying many unique capabilities to the pursuit of one shared vision," according to O'Keefe. It builds on the NASA Vision: "To improve life here, to extend life to there, to find life beyond," and builds on the NASA Mission, as defined by O'Keefe: "To understand and protect our home planet, to explore the universe and search for life, to inspire the next generation of explorers -- as only NASA can."

One NASA is not about closing facilities or divesting capabilities, workforce reductions, ending competition for innovative ideas, or even about giving "all the answers."

One NASA is about "working-together collaboration, teamwork and cultural change, working efficiently --



Photo by Terry Leibold, NASA/Marshall Center

Marshall Center Director Art Stephenson discusses the "One NASA" concept during kick-off ceremonies Dec. 11.

standardizations that free up funding for science, research and engineering, and being aligned with our vision and mission -- doing the things that only NASA can do."

The writer, an employee of ASRI, is the editor of the Marshall Star.

NASA sponsors student robotics competition

NASA Headquarters release

Hheavy metal will rock — and roll — at seven different locations across the country early next year.

Students, engineers and their robotic creations take center stage during NASA sponsored regional robotics competitions and a final national championship "Bot Bowl" in April 2003.

The Marshall Center is sponsoring student teams from Lee High

School and New Century Technology High School in Huntsville, Arab High School in Arab, Madison County Career Academy in Madison County, and Lincoln County High School in Fayetteville, Tenn.

Teams must design a robot that can complete a specified set of tasks within rules announced at the robotics kickoff ceremony in January 2003. This is the fifth consecutive year NASA has sponsored student teams. Last year, NASA sponsored 193 student teams from across the country. This year NASA will fund more than 200 teams.

The annual nationwide robotics

competition is conducted by the non-profit FIRST (For Inspiration and Recognition of Science and Technology) organization in Manchester, N.H. Teams entering the competition are sponsored by NASA and a number of corporations.

Each year, FIRST presents the teams are given a complex task their robot must perform in competition. They receive a kit filled with motors, control computers, raw materials and many of the parts they will need to get started.

The teams, composed of high-school students, teachers, professional engineers and scientists, work together to construct robots for the competition. The engineers come from NASA, private industry, other government agencies and universities. More information about the competition and FIRST is at <http://www.usfirst.org/>

FIRST was started in 1989 by inventor Dean Kamen to provide an exciting and inspirational experience for American youth while exposing students to the potential of engineering and technology fields.

The FIRST Robotics Competition aims to inspire students, provide hands-on activities and foster teamwork. The program provides students with opportunities to work side-by-side with professional engineers to build a robot.

The robotics competition kicks off Jan. 4, at the Verizon Center in Manchester, N.H., with a demonstration of the task for this year's regional and national competitions. Rules, goals and other details, such as the layout of the playing field, will be revealed during NASA TV's broadcast of the ceremony.

The FIRST Robotics Competition is partially sponsored by NASA as part of the Robotics Education Project. In collaboration with FIRST, NASA's Robotics Education Project is hosting seven of the 23 regional competitions around the country. The dates and cities where NASA is hosting regional competitions are March 6-8, in Cleveland, Richmond, Va., and St. Louis; March 13-15, in Annapolis, Md.; March 27-29, in Atlanta; and April 3-5, in Seattle and Los Angeles.

Last steps on Moon leave big impression on

Huntsville, Marshall welcome astronauts Gene Cernan and Harrison Schmitt

by Jonathan Baggs

When the last two men to walk on the Moon appeared at the Marshall Center last week, it was a reminder that what Americans can dream, Americans can do.

Gene Cernan, the last man to walk on the Moon, along with Apollo 17 lunar module pilot Harrison "Jack" Schmitt, visited Huntsville 30 years to the day -- Dec. 11, 1972 -- that they became the last human beings to land on another planet.

The pair visited school children, were guests of honor at a banquet hosted by the Huntsville-Madison County Chamber of Commerce, visited the U.S. Space & Rocket Center, reminisced with former Marshall engineers and rocket scientists, and spoke to a standing room-only audience at the Marshall Center.

"Everywhere we've gone in Huntsville, people have said 'Thank you,'" Cernan said.

Schmitt said even simple questions from children "illustrate the fascination that a new generation has for what we did."



Cernan told the Marshall audience that he used to think of himself, and his fellow Apollo-era moonwalkers, as "just a bunch of ordinary guys ... who had an extraordinary experience" until someone told him: "You may think you are ordinary, but you're one of only 12 human beings who have walked on another planet."

Cernan said such a statement reminds him of all of the people that made his and Schmitt's trip to the Moon possible.

"You folks here at Marshall ... and all across the country, were the ones that made it possible,"

Cernan said. "We should be ... congratulating and thanking you."

Both Cernan and Schmitt expressed excitement for future space travel -- to the Moon and to other planets, saying their mission, and responsibility, now was to inspire the next generation of explorers.

"Anniversaries are sort of like the high ground," Cernan said, "because it gives us a chance to pause, to reflect on the past, and cherish hope for the future."

The writer, employed by ASRI, is the editor of the Marshall Star.



Photos by Emmett Given, NASA/Marshall Center

Apollo 17 astronauts Harrison Schmitt, left, and Gene Cernan, right, receive mementos of their visit from Marshall Center Director Art Stephenson.



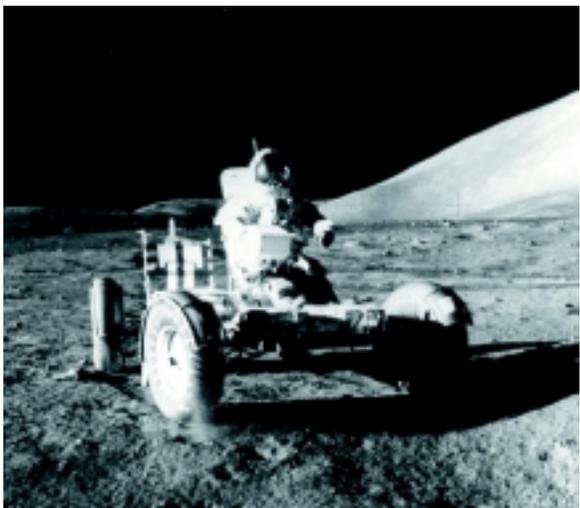
Schmitt, left, and Cernan, right, address Marshall team members.



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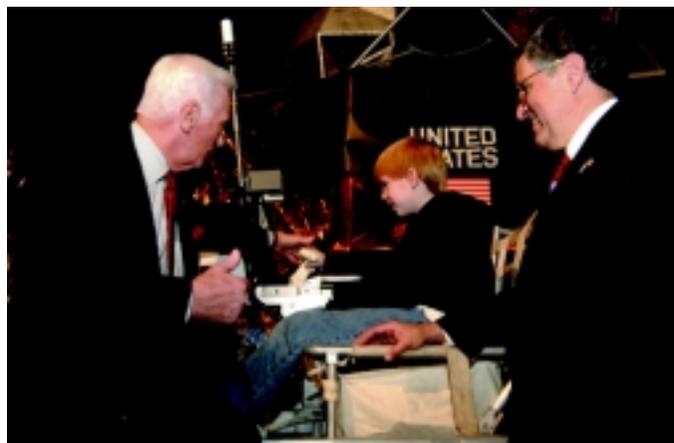
Apollo 17 crewmembers: Gene Cernan, left; Ron Evans, center; and Harrison Schmitt, right; step onto the aircraft carrier U.S.S. Ticonderoga shortly after splashdown on Dec. 19, 1972.

Earth during Apollo 17 30th anniversary



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Apollo 17 Cmdr. Gene Cernan drives the Lunar Roving Vehicle on the Moon. The Marshall Center was responsible for developing and managing the "moonbuggy."



The last two men to drive a Lunar Roving Vehicle give instructions on its operation to Bobby Carter, a fifth-grade student from West Morgan Elementary School in Trinity, who is on a mock-up of the LRV at the U.S. Space & Rocket Center in Huntsville.



Schmitt signs a program for Ashely Beyrd at New Century Technology High School in Huntsville.



Marshall Imaging Services

Apollo 17 moments before splashdown in the Pacific Ocean.



Schmitt and Cernan view memorabilia in Heritage Gallery in Bldg. 4200 at the Marshall Center.



Cernan autographs a memento for Jackie Dannenberg, left, and other guests at a reception for retired Marshall employees and their families at the Von Braun Center.

Scientists get 'down-n-dirty', using space to study how earthquakes turn solid soil into shifting sands

by Tracy McMahan

Nothing seems more down-to-Earth than dirt, but scientists are going to space to understand how earthquakes and related strains and stresses disturb soil and sand.

When Space Shuttle Columbia lifts off in January, it will carry the Mechanics of Granular Materials (MGM) experiment, which studies soil behavior under conditions that cannot be duplicated on Earth — the microgravity, or low-gravity created as the Shuttle orbits Earth.

Results from this granular mechanics research can lead to improved foundations for buildings, management of undeveloped land, and handling of powder or granular materials used in chemical, agricultural and other industries.

“Even in North Alabama, we experienced an earthquake tremor last year,” said Buddy Guynes, the experiment’s project manager at the Marshall Center. “This experiment is relevant to our lives on Earth. At NASA, we also want to know how soil behaves at different gravity levels, so one day crews can safely build habitats on Mars and the Moon.”

How do earthquakes and other geological activities, like mining, impart stress to soil causing it to literally become shifting sand?

As an earthquake strikes, it deforms the soil, changing the volume of the soil. If water is present, water pressure may build up in the pore space between the soil grains. What was once a solid foundation begins to flow like a liquid, a process called soil liquefaction. As the soil moves, foundations become unstable, and Earth’s gravity wins out — collapsing buildings, bridges and other structures.

Earth’s gravity also makes it difficult for scientists to study the precise physics of granular mechanics and soil liquefaction.

“On Earth, gravity-induced stresses quickly change the amount of weight, or loads, a foundation can support,” said Dr. Stein Sture, the experiment’s principal investigator at the University of Colorado at Boulder. “We can use space-based research to perform detailed analyses to understand the physics that causes water-saturated, but initially firm foundation soil, to suddenly flow like water.”

The strength of sand or any particulate material depends on how the granular assembly is packed together and interlocked. Moisture or air trapped within or external loads on the site help determine

its weakness or softness. Cyclic loading and instabilities can cause the soil to loosen and collapse under the stress of earthquakes or other pressures.

“Computer tomography scans will produce a series of images that help us study the minute details of individual grains of sand and how they interact with each other,” Sture said. “We can examine the particle arrangement and structure of soils and learn about the strength, stiffness and volume changes that occur when low pressures are applied to granular materials.”

For the STS-107 experiment, three sand columns held inside latex sleeves will be used for nine experiment runs. Ottawa sand — natural quartz sand with fine grains widely used for civil engineering experiments — will be saturated with water to resemble soil on Earth. Each column holds about 2.8 pounds of Ottawa F-75 banding sand.

The flight crew will use a laptop computer to send commands to the experiment, causing the sand to be compressed between two tungsten metal plates. As the sand is compressed and relaxed, a load cell will measure the applied force, and three CCD cameras will record changes in shape and position of the soil inside the column. This compression and relaxation will simulate the loads that might be imparted to soil via earthquakes and other external forces.

The three columns will be used for nine tests or observations

See *Scientists* on page 9



Promoting seat belt safety

The Marshall Safety and Health Action Team is stressing the use of seat belts for drivers and passengers in vehicles, especially during the holiday season. Helping pass out safety information and free key chains to Debbie McWhorter are, left, “Dr. Know” or Rebecca Selvage, and, right, Dr. Jan Davis.

Scientists

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periods. Upon completion of each run, the samples will be expanded and stretched back to their original length to create a homogenous mix of sand and water at the start of each run.

When the Shuttle lands, the sand columns will be imaged using computer tomography at laboratories at Kennedy Space Center, Fla. Then, they will be injected with epoxy, and the columns will be sawed into thin disks. These will be sent to experiment investigators in Colorado and Louisiana for inspection under an optical microscope.

“Our earlier flights showed gravity masked measurements of friction between grains of sand,” said Dr. Khalid Alshibli, project scientist for the experiment and professor of civil engineering at Louisiana State University and Southern University in Baton Rouge. “This is an important factor in determining the amount of weight the soil can support.”

The Mechanics of Granular Materials experiment has flown twice — on Space Shuttle missions STS-79 in 1996 and STS-89 in 1998. These investigations revealed soil specimens were two-to-three-times stronger and much stiffer than scientists had predicted. The 16-day STS-107 flight aboard Columbia gives scientist an opportunity to perform longer, more complex experiments.

Future experiments will benefit from extended tests aboard the International Space Station, including experiments under



Photo by Doug Stoffer, NASA/Marshall Center

Mather accepts public service award

Dr. Bruce Mather, the Marshall Center’s Employee Assistance Program psychologist, accepts the Public Service Group Achievement Award from Marshall Director Art Stephenson, left, and Alan Gettleman, right, overall head of NASA’s employee assistance programs. Mather was cited for his outstanding contributions and steadfast support of the psychological well-being of the NASA and contractor workforce.

simulated lunar and Martian gravity in a science centrifuge.

“We anticipate valuable results from the STS-107 experiments,” said Alshibli. “We are using a novel specimen reformation technique that enables us to use the same specimen for more than one experiment run. This lays the foundation for more extensive, long-term soil research that can be carried out on the International Space Station.”

The writer, employed by ASRI, supports the Media Relations Department.

SOLAR workshop a success

The second-annual Site for Online Learning and Resources training workshop was held Dec. 3-4 in Huntsville.

The purpose of the workshop was to provide training and a forum for managers and administrators to discuss the use of SOLAR and its effectiveness as a tool for conducting training.

This year, 35 people, representing each NASA center, participated. There were 14 presentations, break-out sessions and an awards presentation.

For more information on SOLAR, contact Mercedes Sironi at 1-858-495-0508.



Photo by Doug Stoffer, NASA/Marshall Center

NASA team members attending the SOLAR training workshop in Huntsville.

Obituaries

Haukohl, Guenter Hans Friedrich, 89, of Huntsville, died Dec. 9. Funeral services were held at St. Marks Lutheran Church with the Rev. Janice Mynchenberg officiating and Valhalla Funeral Home directing.

Haukohl was one of the original 118 members of Dr. Wernher von Braun's team that was brought from Germany to the United States in 1945 as part of "Operation Paperclip." He retired from the Marshall Center in 1970 as AST, in Flight Systems Testing.

He is survived by his wife, Ursula Haukohl; one son, Juergen Haukohl of Huntsville; one daughter, Ingeborg Davis of Oklahoma City, Okla.; five grandchildren; and eight great-grandchildren.

Schmidt, Dalton Morris "Morrie," 78, of Westminster, S.C., died Dec. 1. Memorial services were at the Chapel of Sandifer Funeral Home with Dr. Randy Keasler, Carter Morgan and the Rev. Grady Long and the Rev. Don Bickers officiating. Burial was in Heritage Memorial Gardens Mausoleum in Westminster.

An additional memorial service was held at First Baptist Church in Huntsville with Dr. Ralph Langley and the Rev. Mark Seanor officiating.

Schmidt served in the U.S. Army Air Force in World War II as a radar mechanic with duty in the Philippines, New Guinea, Okinawa and Japan. He earned a bachelor's degree in electrical engineering from Purdue University in West Lafayette, Ind., in 1949, and a master's in electrical engineering in 1950 from the University of Florida in Gainesville. He was a charter member of the Marshall Center and retired in 1989 as AST, aerospace engineer in Flight Systems Testing. He was a member of Westminster Baptist Church in Westminster, S.C., and a former Sunday school teacher and choir member at First Baptist Church in Huntsville.

He is survived by his wife, Susan Mildred Harbin Schmidt; two sons, Charles Harbin "Charlie" Schmidt and William Arthur "Bill" Schmidt, both of Huntsville; one brother, Melvin Charles Schmidt of Sidney, Ohio; and one sister, Annetta Faye Parke of Newburgh, Ind.

Safety and Mission Assurance is looking for a 'few good engineers'

by Roy W. Malone, Jr.

The Marshall Center's Safety and Mission Assurance Office is expanding its Reliability and Maintainability Engineering Team to meet the future needs and challenges of the Orbital Space Plane Program, Next Generation Launch Technology Programs and Marshall's flight payload projects.

Reliability and maintainability engineering is taking on a new focus at NASA as the Agency strives for more robust, reusable and maintainable space transportation systems.

"With the recent decision to focus the Center's reliability and maintainability engineering in safety and mission assurance, our organization is now in a position to offer opportunities for interested Marshall engineers," said Amanda Goodson, director of the Safety and Mission Assurance Office. "Not only are

we working to increase our reliability and maintainability workforce, but we are also in the process of developing a comprehensive program to train and develop interested engineers in the reliability and maintainability disciplines."

In addition to looking for engineers at the Marshall Center, the Safety and Mission Assurance Office also has been recruiting outside the Center. Two senior reliability and maintainability engineers are in the process of being hired.

Lateral reassignment bulletins are currently open for several Marshall safety and mission assurance reliability and maintainability engineering positions. These positions are posted at the following Web sites: <http://jsearch.usajobs.opm.gov/summary.asp?OPMControl=TU3334> and <http://jsearch.usajobs.opm.gov/summary.asp?OPMControl=TU3336>.

For more information about specific job opportunities on the safety and mission assurance team, call Dianne Miller, the safety and mission assurance administrative officer, at 544-6833.

The writer is the deputy director of the Marshall Center's Safety and Mission Assurance Office.



Marshall Imaging Services

Job announcements

MS03N0022, AST, Reliability. GS-861-14, Safety and Mission Assurance Office, Safety Reliability and Quality Assurance Policy, Assessment and Integration Department. Closes Dec. 24.

MS03N0023, AST, Reliability. GS-861-13, Safety and Mission Assurance Office, Safety Reliability and Quality Assurance Policy, Assessment and Integration Department. Closes Dec. 24.

MS03C0027, Information Technology Specialist (POLCY PLN). GS-2210-15, Center Operations Directorate, Information Services Department, Operations Group. Competitive Placement Plan. Closes Jan. 2.

AIAA associate fellow

The American Institute of Aeronautics and Astronautics has named Steven D. Pearson, manager of the Marshall Center's Engineering Technology Development Office in the Engineering Directorate, as an associate fellow.

The 2003 Associate Fellow Grade Committee recently selected 192 new associate fellows from 222 candidates.

Center Announcements

SHARP mentors needed for student education programs

The Marshall Center's Education Programs Department needs volunteers to work with students participating in the 2003 NASA Summer High School Apprenticeship Program. SHARP offers high school students opportunities to participate in an eight-week science and engineering program. Researchers and other science and engineering professionals are encouraged to volunteer as mentors. For more information, call 544-6025.

Mentors needed for Equal Opportunity program

Employees in Marshall's technical directorates are encouraged to volunteer as mentors for the 2003 Equal Opportunity Office Summer Internship Program. For more information, call Madeline Hereford at 544-7420.

NASA Ski Week reservations being accepted

The 12th-annual NASA Ski Week will be at Big Mountain ski resort in Montana Feb. 22-March 1, 2003. This is a 3,000-acre ski resort overlooking Glacier National Park. All Marshall team members, retirees, spouses and dependents are eligible to participate. For more information, call 233-0705 or e-mail Thomas.S.Dollman@msfc.nasa.gov.

Federal Express packages due no later than 2:30 p.m.

The deadline for Federal Express packages to be at the mail room in Bldg. 4200 is 2:30 p.m. if you expect your package to go out the same day. Any packages brought in later than 2:30 p.m. will be shipped the following day. The FedEx Manager system requires a recipient's phone number on Form 4182.

Travel payment update

The backlog of travel vouchers received in the Travel Office 30 days ago or more, have been sent for payment processing. Travelers should receive their deposits this week. Vouchers that are less

than 30 days old are expected to be paid within the next two weeks. To assist continuing payments in a timely manner, vouchers should be "stamped" in Travel Manager as soon as possible and all receipts promptly forwarded to the Travel Office. It is estimated that vouchers will take up to 10 working days to complete.

Blood drive is Friday

The American Red Cross blood drive is from 8 a.m.-1:30 p.m. Friday in Bldg. 4316, the Center Activities Building. All blood types are needed. Donors will receive a certificate for a free pizza and a free T-shirt.

Power outage set for Dec. 28-29

A 12-hour, total power outage, will be from 6 p.m. Dec. 28-6 a.m. Dec. 29, in Bldg. 4207 and Bldg. 4663. All telephone, data and e-mail services will be affected. Access to Marshall services from off-site users will be unavailable. All Marshall telephone, remote access, emergency warning, Marshall pager system and Integrated Financial Management services centerwide also will be unavailable during this time. During the power outage, the NASA Information Support Center and the NACC Technical Services Center can be contacted at 837-9498. Marshall security services can be contacted at 895-8156. All onsite 911 emergencies must be reported to Security at 895-8156. For more information, call 544-HELP, Option 0.

Florida A&M University Alumni and Friends seeking members

Area alumni of Florida A&M University interested in establishing a Huntsville chapter can call Robert McCoy at 858-0830 or Wendell Johnson at 427-7043.

Weight Watchers session to begin Jan. 23

The Weight Watchers group will begin a 15-week session on Jan. 23. Cost is \$165 and the program is open to all civil service and contractors at the Marshall

Center. To sign up, or for more information, call Rachael Towle at 544-1525.

Engineering fracture mechanics course set for Feb. 24-26

An "Introduction to Fracture Mechanics, Life Assessment and Fracture Control" course will be offered Feb. 24-26 if Marshall team members are interested. The course is being presented by the Marshall Center Engineering Initiative in Fatigue and Fracture, which is a voluntary effort within the Engineering Directorate. The purpose is to pursue a systematic approach to improving the fracture control process, and is part of an effort to improve workforce awareness and education in fracture control. Lectures will be presented by Robert H. Dodds, professor of civil engineering at the University of Illinois at Urbana-Champaign, and James C. Newman Jr., professor of aerospace engineering at Mississippi State University. Tentative times are 9-11:30 a.m. and 1-3:30 p.m. each day. Locations will be announced. Interested participants can call Doug Wells at 544-3300 in ED33 for more information.

Measurement workshop abstract deadline is Jan. 31

Abstract submittal deadline for the Propulsion Measurement Sensor Development Workshop, set for May 13-15 in Huntsville, is Jan. 31. Forms are available at <http://spacetransportation.com>

Marshall Star office closed until Jan. 6

The Marshall Star office will be closed Dec. 20-Jan. 6, with publication resuming Jan. 9. Classified ads still can be submitted during this time and will be included, depending on the number received, in the Jan. 9 issue. Ads are limited to 15 words, including the home phone number of the seller, and are subject to editing for length and clarity. Civil servants, onsite contractors and Marshall retirees may run ads free of charge. For more information on classified ad policies, call Janie Crawford at 544-0514.

Employee Ads

Miscellaneous

- ★ Sumter Collection bedroom set: 2 beds, mattress sets, dresser, mirror, chest of drawers, \$1,200. 722-5282
- ★ Gateway computer, 36" TV/PC monitor, 23GB HD, surround-sound, DVD/CD ROM, 500 Mhz, \$1,600. 830-8435
- ★ White fox jacket, \$150; 1989 Lebaron interior parts: cloth seats, radio, CD player, \$100. 653-4333
- ★ BMW Motorsport 5-speed aluminum shift knob, fits all except E31 8-series, \$45. 922-1424
- ★ Small trampoline, \$15. 882-1413
- ★ Spectrum side-by-side double stroller, \$20; changing table, pad, 2 terrycloth cover, \$40. 722-2109
- ★ Two female AKC Siberian Huskies, 6-months old, good w/children, \$125 each. 776-9506/776-4496
- ★ Remington rifle, Model 742, 30-06 w/ Bushnell 3x9 scope, extra clip, sling studs, \$285. 379-3606
- ★ Bose 901 speakers, pre-amp, stands, \$875 obo. 922-1424
- ★ Department 56 Snow Village Collection, individually or as a set, all retired pieces. 837-0037
- ★ Purebred Australian Shepherd puppies, wormed, first shots, vet checked, \$75 each. 256-561-2287
- ★ Seasoned firewood, delivery available, \$45 per rick. 379-2020
- ★ Used 36" wood entry door and storm door, \$30 each, \$50 both. 828-5326
- ★ Retired Department 56 houses & accessories. 881-0457
- ★ Floor lamp, bright brass, 4-lamp sockets; two floor lamps w/flexible shaft below shade, \$25 each. 881-6040
- ★ Sears Kenmore undercounter dishwasher w/interchangeable color door

- panels, \$60. 852-1363
- ★ Antique 52" Queen Anne table and 4 chairs, walnut, \$500. 881-4418
- ★ Two tickets to "Cinderella", Sunday, Jan. 12, 2 p.m., Center Row H, \$36 each. 881-0755
- ★ Dell computer, 400Mhz, 128Mb RAM, 4Gb RAM, CDROM, modem, 17" monitor, \$325 obo. 882-1779
- ★ Epson LX-800 printer, 2 new ribbons, cables, refurbished print head & documentation, \$100. 256-883-9789
- ★ Boy's stunt bicycle, ridden once, \$75. 864-2629
- ★ Generator, 5250W, 20Amp/10HP, \$450; riding mower w/bagger & wagon, 18HP, 46", \$500. 881-2131
- ★ Federal Airtight wood burning insert/stove, \$250 obo. 828-3181/lv. msg.
- ★ Two-karat diamond ring w/baguette diamonds on each side, \$2,000. 232-0390
- ★ HO train stuff: 13 Atlas remote switches, track, turntable w/motor, more. All unopened. 256-306-0700 lv/msg.

Vehicles

- ★ 1998 Ford Taurus SE, PW/PS/PL, tilt, dark green, 96K highway miles, \$5,200. 772-6769
- ★ 1989 Grand Prix Turbo, loaded, V6, automatic, \$1,000 obo. 859-1121
- ★ 1988 Toyota Corolla, 4-door, one-owner, needs transmission work, \$600 obo. 536-4507 after 5 p.m.
- ★ 1999 GMC Sonoma SLS, 3-door, Xtra cab, 80K miles, 4-3/6-cyl., automatic, am/fm/CD, \$7,950. 256-753-2278
- ★ 1996 Dodge Grand Caravan SE, 132K miles, second sliding door, rear air, \$5,600. 864-3236/656-8902
- ★ 1996 Dodge Grand Caravan, power locks, cruise, 90K miles, \$5,800. 746-9988

- ★ 1995 Buick Riveria, 2-door, 6 cyl., 59K miles, sunroof, PW/PL, keyless entry, \$6,800. 722-8674
- ★ 1991 Honda Civic DX sedan, 5-speed, 128K miles, a/c, AM/FM cassette, \$990 obo. 489-0136
- ★ 2000 Mitsubishi Galant ES, red w/gray interior, 49K miles, CD player, am/fm, PW/PL, cruise, \$13,200. 852-5271
- ★ 1993 Mazda B2600 Cab-Plus Truck, 5-speed, 108.8K miles, a/c, \$2,000. 536-1553
- ★ 1999 Honda CRV-EX, 4WD, CD player, garage kept, 46K miles, \$14,750. 353-0370/565-3022
- ★ 1972 Boise motorhome, 32K miles, \$5,000; 1980 Datsun 200SX, 5-speed hatchback, \$1,500 obo. 256-881-9150
- ★ 1990 Olds Cutlass Supreme, 174K miles, \$1,500. 256-737-9492
- ★ 1999 Acura 3.2 TL, silver, gray leather, 65K miles, \$17,000. 534-1938
- ★ 1996 Chevy Suburban K1500, 4WD, LT, loaded, leather, new tires/brakes, 102K miles, \$13,900. 256-325-3696
- ★ 1986 Silverado SWB, new 350 engine & a/c, positive traction, dual tanks, red, \$4,500. 256- 247-0369

Free

- ★ "Neuschwanstein Castle" puzzle, 6000 pieces, 42"x62". 256-881-5043

Found

- ★ Rain gear in Bldg. 4203, Rm. 1201. Call 544-5635 to identify/claim

Lost

- ★ Brown suede jacket, XXL. 544-6568

MARSHALL STAR

Vol. 43/No. 14

Marshall Space Flight Center, Alabama 35812
(256) 544-0030
<http://www1.msfc.nasa.gov>

The Marshall Star is published every Thursday by the Internal Relations and Communications Department at the George C. Marshall Space Flight Center, National Aeronautics and Space Administration. Contributions should be submitted no later than Monday noon to the Marshall Internal Relations and Communications Department (CD40), Bldg. 4200, room 101. Submissions should be written legibly and include the originator's name. Send electronic mail submissions to: intercom@msfc.nasa.gov The Marshall Star does not publish commercial advertising of any kind.

Manager of Internal Relations
and Communications — Steven Durham
Editor — Jonathan Baggs

U.S. Government Printing Office 2002-533-083-60034

Permit No. G-27
NASA
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